

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) An apparatus for inspecting a plurality of image portions of at least a region of a sample for defects, the apparatus comprising:

a plurality of processors arranged to receive and analyze at least one of the image portions, the processors being arranged to operate in parallel and being ~~dynamically~~ configurable to implement one or more algorithms selected from a plurality of different algorithms for analyzing the image portions to determine whether the corresponding regions of the sample are defective; and

a data distribution system arranged to receive image data, select at least a first processor for receiving a first image portion and not a second image portion of the image data and one or more first algorithms selected from the plurality of different algorithms, select at least a second processor for receiving a the second image portion and not the first image portion of the image data and one or more second algorithms selected from the plurality of different algorithms, output the first image portion to the first processor and the second image portion to the second selected processor, and ~~dynamically~~ configure the first processor with the one or more first algorithms and the second processor with the one or more selected algorithms.

2. (Original) An apparatus as recited in claim 1, wherein the data distribution system is further arranged to divide the image data into a plurality of image portions.

3. (Original) An apparatus as recited in claim 1, wherein the first processor is arranged to receive a first reference image portion corresponding to the first image portion and to compare the first image portion to the first reference image portion, and the second processor is arranged to receive a second reference image portion corresponding to the second image portion and to compare the second image portion to the second reference image portion.